

No. 763,099.

PATENTED JUNE 21, 1904.

W. A. HOSTETLER.
PIPE WRENCH.

APPLICATION FILED APR. 9, 1904.

NO MODEL.

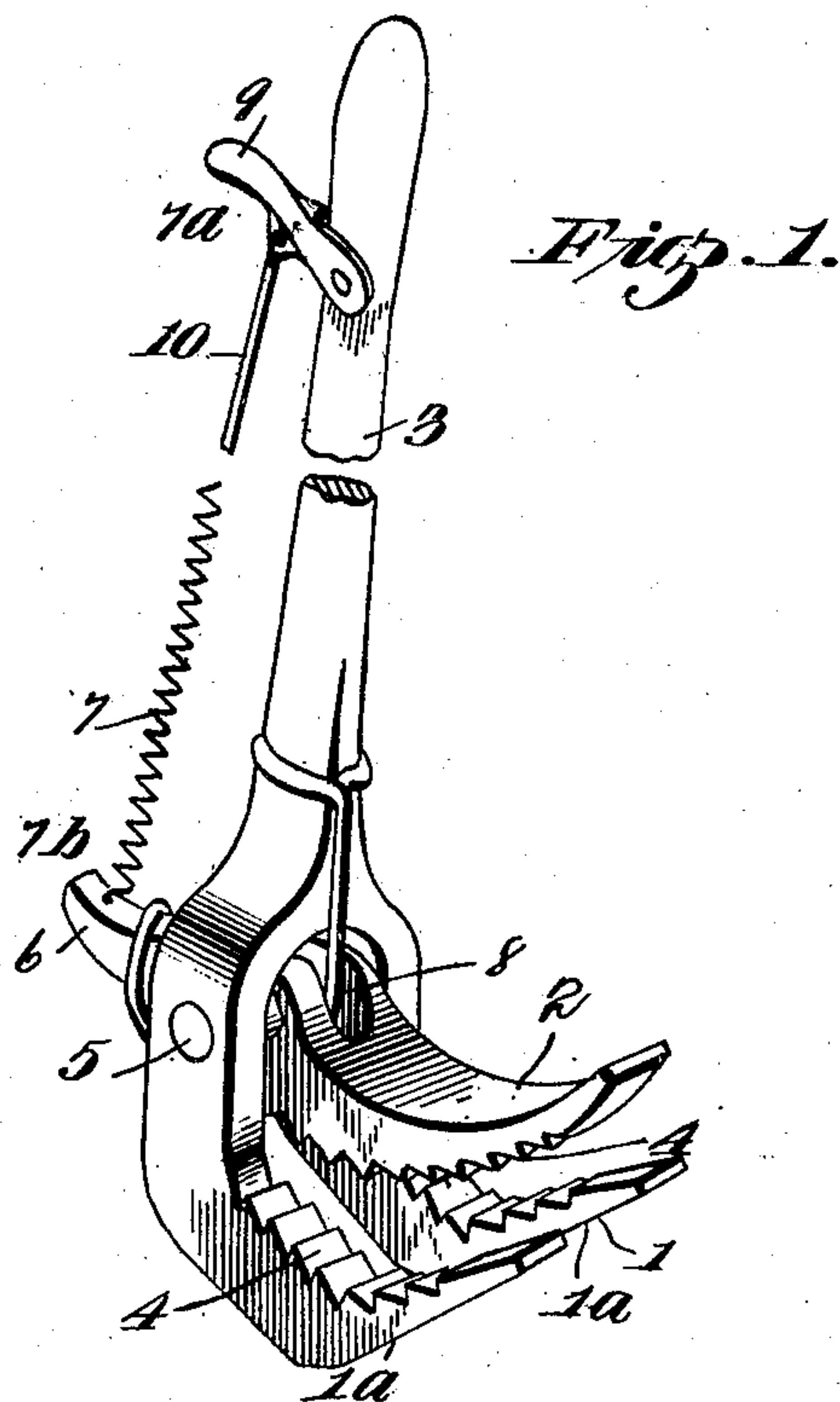


Fig. 1.

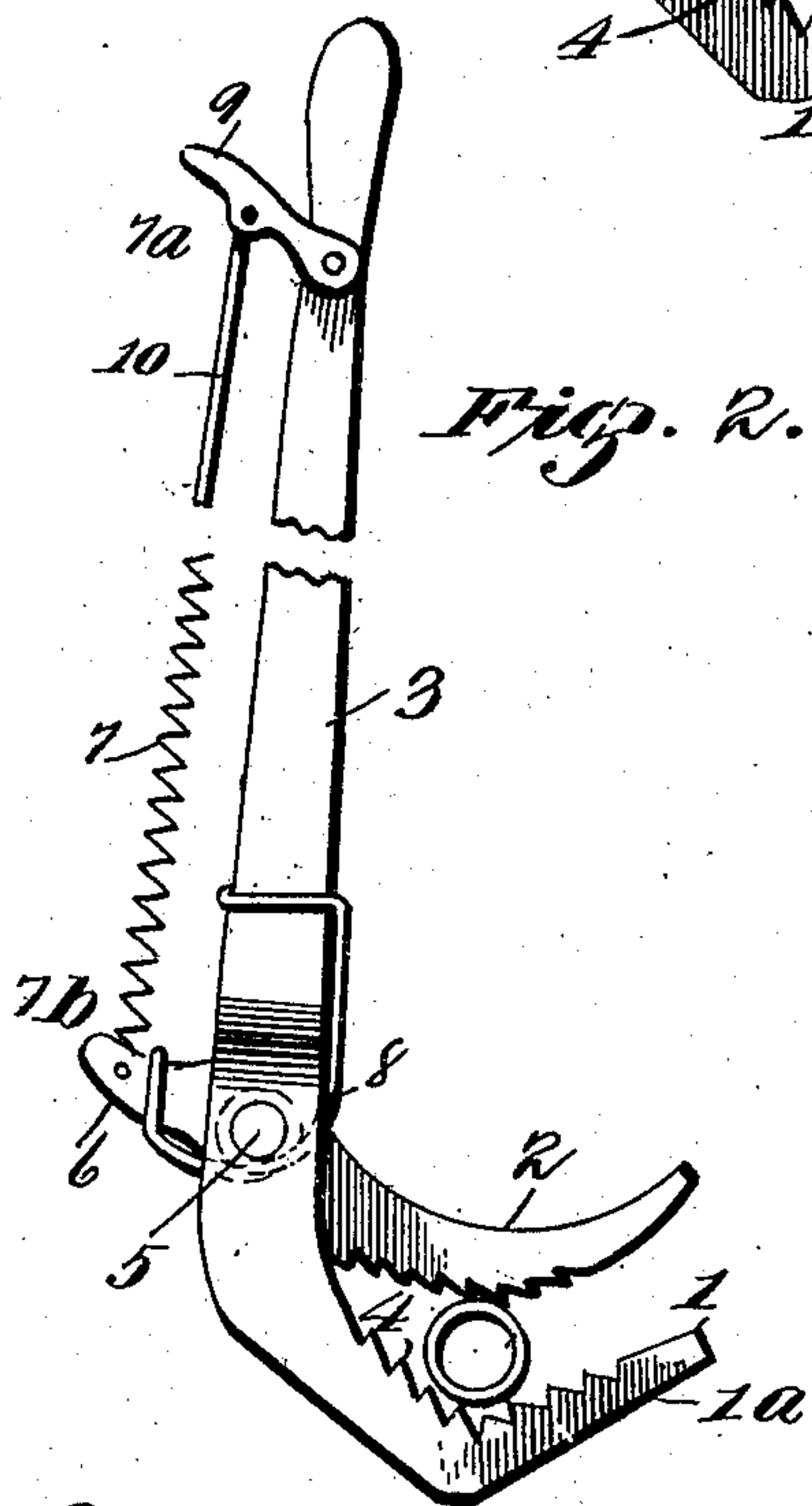


Fig. 2.

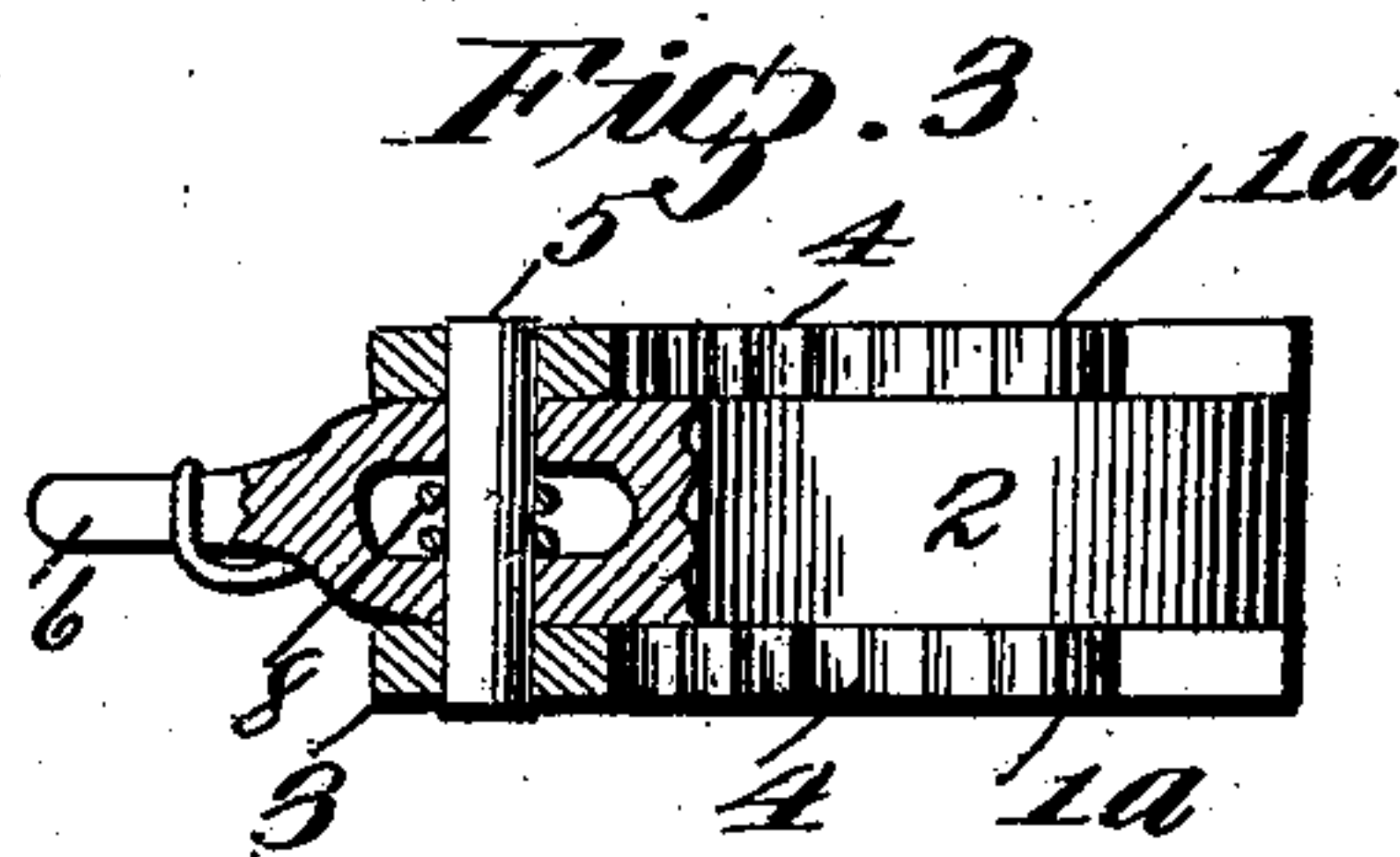


Fig. 3.

Witnesses

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WILLIAM A. HOSTETLER, OF WALNUT, PENNSYLVANIA.

PIPE-WRENCH.

SPECIFICATION forming part of Letters Patent No. 763,099, dated June 21, 1904.

Application filed April 9, 1904. Serial No. 202,450. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. HOSTETLER, a citizen of the United States, residing at Walnut, in the county of Juniata and State of Pennsylvania, have invented certain new and useful Improvements in Pipe-Wrenches, of which the following is a specification.

This invention relates to improvements in that class of implements commonly styled "pipe-wrenches" and provides particularly a special construction of cooperating jaws which are adapted to grip the object which is being operated upon in the actual use of the device. The invention specially resides in the construction of the jaw members, as above premised, and in special means whereby said jaws are held in their normal position and otherwise.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and accompanying drawings.

While the essential and characteristic features of the invention are susceptible of modification, still the preferred embodiment of the invention is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a wrench constructed in accordance with my invention. Fig. 2 is a side elevation, the jaws being shown closed gripping a pipe or similar part. Fig. 3 is a transverse sectional view.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The wrench embodied in my invention is of the type comprising rigid and movable jaws 1 and 2, respectively, which latter are carried by a shank 3, which constitutes the handle by which the implement is manipulated. In carrying out the invention the shank 3 has its lower end bifurcated, so as to form spaced members 1^a, which are curved so as to form the rigid jaw 1, above mentioned. The jaw 1 may be of any suitable form adapted to receive the pipe, the spaced members 1^a thereof being provided with a plurality of teeth 4 to

facilitate the gripping action of the jaw against the object which is being operated upon.

Pivoted between the bifurcated portion of the shank 3 of the wrench and adjacent the rigid jaw 1, which latter is integrally formed with the shank, is the movable jaw 2, the latter being mounted upon a pivot-pin 5 and provided with teeth 4, similar to those of the rigid jaw 1. The movable jaw 2 is provided with a rear extension 6, preferably integral therewith. It is designed that the movable jaw shall remain normally open when the wrench is not in use, and for this purpose a spring 7 is mounted upon the pivot-pin 5, one end of the spring being secured to the shank of the wrench, as shown at 7^a, the other end being secured to the extension 6, as shown at 7^b. The movable jaw 2 is provided with an opening adjacent the point of pivotal support thereof, so as to admit of mounting the spring 7 in the manner above described. The tendency of the spring 7, as before premised, is to cause the jaw 2 to normally remain in an open position as regards the jaw 1. When the wrench is being used, it is of course necessary that some means be provided to hold the movable jaw 2 in engagement with the pipe or like part, and a spring 8 is also utilized to accomplish the above. The spring 8 is connected with the outer end of the extension 6 of the movable jaw 2 at one end, the other end of the spring being connected with a lever 9, pivoted to the upper portion of the shank 3. The spring 8 may be connected with the lever 9 by means of any suitable part 10, which may consist of a rigid connecting device or a flexible member, as found best in the practical embodiment of the invention. When the jaw 1 is not in use, the lever 9 is in the position shown in Fig. 1, being extended from the shank. When the wrench is to be used, however, the lever 9 is thrown upwardly against the shank, and this movement increases the tension of the spring 8, so as to thereby overcome the tension of the spring 7. Since the tension of the spring 8 is greater than the spring 7, the movable jaw 2 is caused to close against the object received between the jaws of the implement, whereupon the wrench may be manipulated in the usual manner to effect the desired result. The part

10 is connected with the lever 9 at a point between the ends of the latter. After the wrench has been used the lever 9 is thrown downwardly, whereupon the spring 7 coöperates with the jaw 2, because the latter has assumed its normal position open preparatory to engagement of the device with an object.

The wrench is comparatively simple relative to the number of parts employed and the arrangement thereof, and it will be noted that the engagement and disengagement of the jaws may be quickly accomplished by operation of suitable parts.

Having thus described the invention, what is claimed as new is—

1. In a wrench, the combination of a shank provided with a rigid jaw, a movable jaw, spring means for normally holding the movable jaw open, and other spring means for effecting closing movement of said jaw.

2. In a pipe-wrench, the combination of a shank provided with a rigid jaw, a movable jaw, a spring normally holding the movable jaw open, a second spring coöperating with the movable jaw, and means for increasing the tension of the said second spring to effect closing movement of the movable jaw.

3. In a pipe-wrench, the combination of a shank provided with a rigid jaw, a movable jaw, a spring normally holding the movable jaw open, a second spring coöperating with the movable jaw, and a lever mounted upon the shank and coöperating with the second spring to effect closing of the movable jaw.

4. In a pipe-wrench, the combination of a shank provided with a rigid jaw, a movable

jaw, a spring connected at one end with the shank, at the other end with the movable jaw, and adapted to normally hold said jaw open, a second spring coöperating with the movable jaw, and means for increasing the tension of the second spring to effect closing of the movable jaw.

5. In a pipe-wrench, the combination of a shank provided with a rigid jaw, a movable jaw, an extension projected from the movable jaw, a spring connected at one end with the shank and at the other end with the extension of the movable jaw and normally holding said movable jaw open, and a second spring connected with the extension of the movable jaw and adapted to effect closing movement of said jaw.

6. In a pipe-wrench, the combination of a shank provided with a rigid jaw, a movable jaw pivoted to the shank and provided with a rear extension, a spring connected at one end with the shank and at the other end with the extension of the movable jaw and normally holding the said movable jaw open, a second spring connected at one end with the extension of the movable jaw, and a lever mounted upon the shank and coöperating with the second spring to increase the tension thereof to close the movable jaw.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM A. HOSTETLER. [L. s.]

Witnesses:

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